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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,206	01/26/2007	Michael O'Regan	3583 P 007	5176
	7590 11/19/200 ', WILL & EMERY LI	EXAMINER		
Attn: IP Department 227 WEST MONROE STREET SUITE 4400 CHICAGO, IL 60606-5096			DANNEMAN, PAUL	
			ART UNIT	PAPER NUMBER
			3627	
			MAIL DATE	DELIVERY MODE
			11/19/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/534,206	O'REGAN ET AL.
Office Action Summary	Examiner	Art Unit
	PAUL DANNEMAN	3627
The MAILING DATE of this communication ap Period for Reply	opears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING ID. - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO .136(a). In no event, however, may a reply be tid d will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDON	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on <u>06 I</u> This action is FINAL . 2b) ☐ This action is FINAL . Since this application is in condition for allowed closed in accordance with the practice under	is action is non-final. ance except for formal matters, pr	
Disposition of Claims		
4) Claim(s) 1-12 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 1-12 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/ Application Papers 9) The specification is objected to by the Examin	awn from consideration. or election requirement. ner.	ho tha Essania a
10)⊠ The drawing(s) filed on <u>06 May 2005</u> is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the corre- 11)□ The oath or declaration is objected to by the E	e drawing(s) be held in abeyance. Se ction is required if the drawing(s) is of	ee 37 CFR 1.85(a). Djected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of: 1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	nts have been received. nts have been received in Applica ority documents have been receiv au (PCT Rule 17.2(a)).	tion No red in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail I 5) Notice of Informal 6) Other:	oate

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DETAILED ACTION

Status of the Claims

1. This Office Action is in response to Applicant's filing on 6 May 2005.

2. Claims 1-12 are pending and have been examined in this Office Action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly

claiming the subject matter which the applicant regards as his invention.

4. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to

particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites "wherein the routing criteria is determined independently of parameters uniquely

associatble with the specific data transaction", but does not specifically disclose how the routing

criteria is determined, thereby rendering the claim broad and indefinite. Appropriate correction is

required.

5. The following is a quotation of the sixth paragraph of 35 U.S.C. § 112:

An element in a claim for a combination may be expressed as a means or step for performing a

specified function without the recital of structure, material, or acts in support thereof, and such claim shall

be construed to cover the corresponding structure, material, or acts described in the specification and

equivalents thereof.

6. Claim 12 has "means plus function" limitations that invoke 35 U.S.C. § 112, sixth paragraph.

However the written description fails to disclose the corresponding structure, material, or act of the

claimed function. The claim elements disclose the following functions a means for receiving at least one

identifier uniquely associatable with a data transaction from the switching center, means for evaluating

the data transaction to as to determine a correct tariff rate for that transaction, and means for routing that

tariff rate to a billing destination, however the written description fails to sufficiently disclose the structure

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for performing the functions as recited in this claim. See MPEP § 6.08.01(o) and § 2181 and 37 CFR

1.75(d). Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as

set forth in section 102 of this title, if the differences between the subject matter sought to be

patented and the prior art are such that the subject matter as a whole would have been obvious

at the time the invention was made to a person having ordinary skill in the art to which said

subject matter pertains. Patentability shall not be negatived by the manner in which the invention

was made.

8. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966),

that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are

summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or

nonobviousness.

9. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Titus et al., US

7,428,510 B2 hereinafter known as Titus and in further view of Countryman et al., US 6,952,575 B1 which

is incorporated by reference and hereinafter known as Countryman.

Claim 1:

With regard to the following limitations:

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 Wherein the mobile telecommunication network incorporates a data switching center,

The data switching center being adapted to receive data transactions transmitted
by a subscriber, and

Route them to the appropriate destination,

Titus in at least Fig.1, Fig.2 and Column 1, lines 60-67 discloses a method and apparatus for handling a prepaid messaging service which is comprised of tariffing a short message before transmission where an account database is queried to determine if an account corresponding to an addressed part of the short message has sufficient funds to pay for transmission of the short message and if sufficient funds are available the short message is transmitted. Titus in at least Column 3, lines 18-32 discloses that Countryman discloses an architecture and method for providing prepaid voice call management in an intelligent network where conventionally, wireless and Internet short messaging services have been capable of billing on a postpaid basis.

Countryman in at least Fig.1, Fig.3A and Column 1, lines 9-13 discloses a method, an apparatus and network architecture for <u>management of calls</u>, particularly prepaid calls in a telecommunications intelligent network. Countryman in at least Column 2, lines 23-37 discloses an invention for <u>managing a call between an originator and a destination</u> in a telecommunications network. Countryman further discloses that the present invention is comprised of the steps of <u>receiving a call initiation from the originator</u>, <u>determining a service type associated with the call</u>, <u>routing the call handle of the call</u> to a service control point if the service type is a first service type, e.g., a prepaid service type, the <u>service control point having a database of profiles</u> of the plurality of subscribers of the telecommunications network, exchanging at least one message between the service control point and a service switching point to establish a communication link between the originator and the destination.

Countryman in at least Column 2, lines 50-61 further discloses that the <u>establishment of the communication link</u> is based on <u>account balance information of the plurality of subscribers</u> stored in the database.

Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill to combine the well known elements of Titus regarding prepaid messaging service with the equally well known elements of Countryman regarding determining the service type associated with post-paid and pre-paid calls with the motivation to insure that subscribers/clients are properly billed for the usage of each of the various service types.

- Receiving service detail records of a specific data transaction transmitted by or to a subscriber containing unique indicia associated with the subscriber,
- Associating the retrieved unique indicia with one or more records previously stored in a subscriber database so as to establishing routing criteria for the specific subscriber,
- Effecting the calculation of a tariff for the data transaction, and
- Routing the tariff to one or more billing destinations based on the routing criteria.

Titus does not specifically disclose the use of unique indicia associated with the subscriber per se, however in at least Column 3, lines 33-41 discloses that real-time billing can be implemented for the delivery of short messages, allowing the prepayment of short message services. The <u>real-time billing</u> can <u>debit subscriber balances for service usage</u> and can suspend short messaging services for a <u>particular subscriber when the subscriber's account balance is depleted</u>. Titus in at least Column 2, lines 49-57 further discloses that short messages may be tariffed based on the substance (size of, etc.) of the short message being transferred.

Titus in at least Column 4, lines 22-27 further discloses that the prepaid short messaging server 200 comprises a prepaid short messaging account database 110, a prepaid short messaging service application 100, and a prepaid short messaging service rating engine (i.e. prepaid tariff engine) 150.

Titus in at least Column 4, lines 41-50 discloses that the prepaid short messaging service supports service provider creation of subscriber classes of service that define and uniquely identify subscriber rate and/or tariffing plans used to apply real-time billing charges for sending or receiving messages

Titus in at least Fig.1, Column 4, lines 59-67 and Column 5, lines 1-42 discloses the SMSC application 120 receiving an (SMSC-MO) mobile originated small message service from Mobile A and destined for Mobiles B & C (104, 106) and a Desktop Chat client (190) which are non-prepaid accounts. The SMSC validates the identify of Mobile A 102, then queries the prepaid short messaging account database 110 to determine if sufficient balance exists to deliver the message originated by Mobile A. The prepaid messaging service 100 invokes the prepaid tariff engine 150 to determine the appropriate message billing based upon, including but not limited to, the following exemplary criteria: Flat rate per message, message count (e.g., 10 messages @ \$5.00), character count (e.g., \$0.01/character), Time of Day, Day of Week (i.e. peak & non-peak hours), and/or mobile location (i.e. network point code). Mobile A's account is then debited based upon the billing rate as computer by the prepaid tariff engine 150 and the message is delivered to Mobile B & C and the Desktop Chat client.

Claim 2:

With regard to the limitation:

 Wherein the routing criteria is determined based on the parameters uniquely associated with the specific data transaction.

Titus in at least Colum 5, lines 21-28 discloses a prepaid messaging service 100 invokes the prepaid tariff engine 150 to determine the appropriate message billing based upon, including but not limited to, the following exemplary criteria: Flat rate per message, message count (e.g., 10 messages @ \$5.00), character count (e.g., \$0.01/character), Time of Day, Day of Week (i.e. peak & non-peak hours), and/or mobile location (i.e. network point code).

Claim 3:

With regard to the limitation:

Wherein the routing criteria is determined independently of parameters uniquely associated with the specific data transaction.

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Titus in at least Column 2, lines 40-47 discloses that voice telephone calls are conventionally

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billed or tariffed based on a length of the telephone call.

Titus in at least Column 5, lines 21-28 discloses a message being billed using a flat rate per

message.

Claims 4 and 5:

With regard to the limitations:

Wherein the one or more billing destinations are selected from the following:

• An account uniquely associatable with the subscriber, updatable by the

subscriber, and reference-able by the subscriber database and/or interfaced with

another component of the mobile network.

Wherein the account is updatable upon the transmission of a data transaction by

the subscriber within the telecommunication network.

Titus in at least Column 2, lines 40-47 discloses that voice telephone calls are conventionally

billed or tariffed based on a length of the telephone call.

Titus in at least Colum 5, lines 21-28 discloses a prepaid messaging service 100 invokes the

prepaid tariff engine 150 to determine the appropriate message billing based upon, including but

not limited to, the following exemplary criteria: Flat rate per message, message count (e.g., 10

messages @ \$5.00), character count (e.g., \$0.01/character), Time of Day, Day of Week (i.e. peak

& non-peak hours), and/or mobile location (i.e. network point code). The subscriber's account is

subsequently billed.

Claim 6:

With regard to the limitation:

Wherein the routing of the tariff is effected in the same time frame as the

transmission of the data transaction.

Titus in at least Fig.1, Column 4, lines 59-67 and Column 5, lines 1-42 discloses the SMSC application 120 receiving an (SMSC-MO) mobile originated small message service from Mobile A and destined for Mobiles B & C (104, 106) and a Desktop Chat client (190) which are non-prepaid accounts. The SMSC validates the identify of Mobile A 102, then queries the prepaid short messaging account database 110 to determine if sufficient balance exists to deliver the message originated by Mobile A. The prepaid messaging service 100 invokes the prepaid tariff engine 150 to determine the appropriate message billing based upon, including but not limited to, the following exemplary criteria: Flat rate per message, message count (e.g., 10 messages @ \$5.00), character count (e.g., \$0.01/character), Time of Day, Day of Week (i.e. peak & non-peak hours), and/or mobile location (i.e. network point code). Mobile A's account is then debited based upon the billing rate as computer by the prepaid tariff engine 150 and the message is delivered to Mobile B & C and the Desktop Chat client.

Claim 7:

With regard to the limitation of any one of Claims 1 to 5:

 Wherein the routing of the tariff is delayed for a predetermined time period so as to enable the grouping of multiple tariffs for subsequent routing to a billing destination.

Titus/Countryman do not specifically disclose the limitation above per se, however Titus in at least Column 5, lines 64-67 and Column 6, lines 1-2 discloses that the prepaid short messaging service 100 interfaces with a Short Message Service Center 120 and/or Web servers 140, 170 to buffer subscriber messages for a variable period of time and informs subscribers of pending messages. The application preferably suspends the subscriber service until their account balance has been sufficiently replenished. Titus in at least Column 7, lines 60-62 discloses that the present invention may accumulate and transmit short messages during non-peak or otherwise desirable times to reduce costs. Therefore, it would have obvious at the time of the invention, to one of ordinary skill to modify Titus' ability to accumulate and transmit short messages at an

opportune time with the ability to accumulate tariffs over a pre-determined time period before routing to a billing destination with the motivation to minimize the amount of traffic due to the billing activity.

Claim 8:

With regard to the limitation:

 Wherein the one or more billing destinations are adapted to enable communication between the billing destinations to allow one billing destination to update another billing destination.

Titus does not specifically disclose the limitation above per se, however Titus in at least Column 3, lines 49-53 discloses that the prepaid short messaging service can be implemented as a standalone service, or may be bundled with other applications, e.g., with a prepaid voice telephone call wireless application.

Countryman in at least Fig.1, Fig.2 and Column 8, lines 34-42 discloses in step 216, the prepaid service logic 107 may optionally initiate a transmission of a message indicating the updated balance information to either the originator 101 or an optional IP/SN 111, which in turn forwards the information to the originator 101. Countryman in at least Fig. 3A, Fig. 3B, Fig.4 and Column 9, lines 41-50 further discloses in step 410, the service logic 307 may initiate a transmission of a message indicating the updated balance information to either the subscriber/destination 301 or an optional IP/SN 310, which in turn forwards the information to the subscriber destination 301.

Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill to combine the well known elements of Titus regarding prepaid messaging service with the equally well known elements of Countryman regarding determining the party responsible for the billing and forwarding the billing data to the proper billing destination to insure that responsible subscribers/clients are properly billed and properly informed regarding billing events affecting their account(s).

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Claim 9:

With regard to the limitations:

• Method to determine a correct transaction tariff value for the specific data

transaction, comprising the steps of:

Receiving a message identifier from at least one messaging platform, the message

identifier being associated with a specific data transaction being routed through

the messaging platform and having at least one unique identifier associated with

the subscriber to the telecommunication network,

Comparing the at least one identifier to determine a correct transaction tariff value

for the data transaction,

Routing the tariff value determined to one or more tariff destinations, based on the

at least one identifier, and

Wherein the determination of the correct tariff value is effected in a multi-step

process.

Titus does not specifically disclose the use of unique indicia associated with the subscriber or the

use of a multi-step process for determining the correct tariff value per se; however in at least

Column 3, lines 33-41 discloses that real-time billing can be implemented for the delivery of short

messages, allowing the prepayment of short message services. The real-time billing can debit

subscriber balances for service usage and can suspend short messaging services for a particular

subscriber when the subscriber's account balance is depleted. Titus in at least Column 2, lines

49-57 further discloses that short messages may be tariffed based on the substance (size of, etc.)

of the short message being transferred.

Titus in at least Column 4, lines 22-27 further discloses that the prepaid short messaging server

200 comprises a prepaid short messaging account database 110, a prepaid short messaging

service application 100, and a prepaid short messaging service rating engine (i.e. prepaid tariff

engine) 150.

Titus in at least Column 4, lines 41-50 discloses that the prepaid short messaging service supports service provider creation of subscriber classes of service that define and uniquely identify subscriber rate and/or tariffing plans used to apply real-time billing charges for sending or receiving messages

Titus in at least Fig.1, Column 4, lines 59-67 and Column 5, lines 1-42 discloses the SMSC application 120 receiving an (SMSC-MO) mobile originated small message service from Mobile A and destined for Mobiles B & C (104, 106) and a Desktop Chat client (190) which are non-prepaid accounts. The SMSC validates the identify of Mobile A 102, then queries the prepaid short messaging account database 110 to determine if sufficient balance exists to deliver the message originated by Mobile A. The prepaid messaging service 100 invokes the prepaid tariff engine 150 to determine the appropriate message billing based upon, including but not limited to, the following exemplary criteria: Flat rate per message, message count (e.g., 10 messages @ \$5.00), character count (e.g., \$0.01/character), Time of Day, Day of Week (i.e. peak & non-peak hours), and/or mobile location (i.e. network point code). Mobile A's account is then debited based upon the billing rate as computer by the prepaid tariff engine 150 and the message is delivered to Mobile B & C and the Desktop Chat client.

Countryman however discloses a multi-step process for determining the correct tariff.

Countryman in at least Fig.1, Fig.3A and Column 1, lines 9-13 discloses a method, an apparatus and network architecture for <u>management of calls</u>, particularly prepaid calls in a telecommunications intelligent network. Countryman in at least Column 2, lines 23-37 discloses an invention for <u>managing a call between an originator and a destination</u> in a telecommunications network. Countryman further discloses that the present invention is comprised of the steps of receiving a call initiation from the originator, determining a service type associated with the call, routing the call handle of the call to a service control point if the service type is a first service type, e.g., a prepaid service type, the service control point having a database of profiles of the plurality of subscribers of the telecommunications network, exchanging at least one message between the

service control point and a service switching point to establish a communication link between the originator and the destination.

Countryman in at least Column 2, lines 50-61 further discloses that the <u>establishment of the communication link</u> is based on <u>account balance information of the plurality of subscribers</u> stored in the database.

Therefore, it would have been obvious, at the time of the invention to modify the Titus/Countryman combination to use a message identifier to identify the type of message and the applicable tariff and to use a unique identifier/indicia to associate the message with the subscriber with the motivation to insure that a subscriber was properly billed for usage of the telecommunication network and related services.

Claim 10:

With regard to the limitations:

- Applying a set of pre-configurable rules to rating parameters uniquely identifiable with the specific data transaction so as to determine a rating criteria for that data transaction, and
- Comparing the rating criteria to a plurality of pricing criterion to evaluate the correct pricing criteria for that rating criteria, the correct pricing criteria providing the correct tariff value.

Titus in at least Column 4, lines 41-50 discloses that the prepaid short messaging service supports service provider creation of subscriber classes of service that define and uniquely identify subscriber rate and/or tariffing plans used to apply real-time billing charges for sending or receiving messages.

Titus in at least Fig.1, Column 4, lines 59-67 and Column 5, lines 1-42 discloses the SMSC application 120 receiving a (SMSC-MO) mobile originated small message service from Mobile A and destined for Mobiles B & C (104, 106) and a Desktop Chat client (190) which are non-prepaid accounts. The SMSC validates the identify of Mobile A 102, then gueries the prepaid short

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messaging account database 110 to determine if sufficient balance exists to deliver the message

originated by Mobile A. The prepaid messaging service 100 invokes the prepaid tariff engine 150

to determine the appropriate message billing based upon, including but not limited to, the

following exemplary criteria: Flat rate per message, message count (e.g., 10 messages @

\$5.00), character count (e.g., \$0.01/character), Time of Day, Day of Week (i.e. peak & non-peak

hours), and/or mobile location (i.e. network point code). Mobile A's account is then debited based

upon the billing rate as computer by the prepaid tariff engine 150 and the message is delivered to

Mobile B & C and the Desktop Chat client.

Claim 11:

With regard to the limitation:

Wherein the correct tariff value may be further modified by at least one price

modifier, the at least one price modifier being definable by a set of rules uniquely

associatable with the subscriber, and wherein the modified tariff value is the

correct tariff value.

Titus in at least Column 4, lines 41-50 discloses that the prepaid short messaging service

supports service provider creation of subscriber classes of service that define and uniquely

identify subscriber rate and/or tariffing plans used to apply real-time billing charges for sending or

receiving messages.

Claim 12:

With regard to the limitations:

• A billing and routing module comprising:

Means for receiving at least one identifier uniquely associatable with a data

transaction from the data switching centre,

Means for evaluating the data transaction to as to determine a correct tariff rate for

that transaction,

 Means for routing that tariff rate to a billing destination, and wherein the billing destination is selected from a plurality of configurable billing destination, at least one of which is not co-resident with the module.

Titus does not specifically disclose the use of identifier/unique indicia associated with the subscriber per se, however in at least Column 3, lines 33-41 discloses that real-time billing can be implemented for the delivery of short messages, allowing the prepayment of short message services. The <u>real-time billing</u> can <u>debit subscriber balances for service usage</u> and can suspend short messaging services for a <u>particular subscriber when the subscriber's account balance is depleted</u>. Titus in at least Column 2, lines 49-57 further discloses that short messages may be tariffed based on the substance (size of, etc.) of the short message being transferred.

Titus in at least Column 4, lines 22-27 further discloses that the prepaid short messaging server 200 comprises a prepaid short messaging account database 110, a prepaid short messaging service application 100, and a prepaid short messaging service rating engine (i.e. prepaid tariff engine) 150.

Titus in at least Column 4, lines 41-50 discloses that the prepaid short messaging service supports service provider creation of subscriber classes of service that define and uniquely identify subscriber rate and/or tariffing plans used to apply real-time billing charges for sending or receiving messages

Titus in at least Fig.1, Column 4, lines 59-67 and Column 5, lines 1-42 discloses the SMSC application 120 receiving an SMSC mobile originated from Mobile A and destined for Mobiles B & C (104, 106) and a Desktop Chat client (190) which are non-prepaid accounts. The SMSC validates the identify of Mobile A 102, then queries the prepaid short messaging account database 110 to determine if sufficient balance exists to deliver the message originated by Mobile A. The prepaid messaging service 100 invokes the prepaid tariff engine 150 to determine the appropriate message billing based upon, including but not limited to, the following exemplary criteria: Flat rate per message, message count (e.g., 10 messages @ \$5.00), character count (e.g., \$0.01/character), Time of Day, Day of Week (i.e. peak & non-peak hours), and/or mobile

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location (i.e. network point code). Mobile A's account is then debited based upon the billing rate

as computer by the prepaid tariff engine 150 and the message is delivered to Mobile B & C and

the Desktop Chat client.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should

be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can

normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

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1000.

/Paul Danneman/

Examiner, Art Unit 3627

9 November 2009

/F. Ryan Zeender/

Supervisory Patent Examiner, Art Unit 3627